

REMARKS

Claims 8 through 63 remain pending in the present application.

REJECTION UNDER 35 U.S.C. § 103

Claims 8 through 63 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Kong (U.S. Pat. No. 6,275,186) in view of Chen, et al. (U.S. Pat. No. 6,496,701). Applicant respectfully traverses this rejection.

The Kong '186 patent discloses a device and method for locating a mobile station in a mobile communication system. However, the Kong '186 patent fails to disclose or suggest "evaluating the probability that two or more base stations identified using respective pilot pseudo noise offset measurements are within range and have a pilot signal receivable by a mobile station concurrently, thereby confirming a valid identification of the two or more base stations."

The Chen '701 patent discloses a method of identifying a sub-cell that a mobile station is located in. However, the Chen '701 patent fails to disclose or suggest "evaluating the probability that two or more base stations identified using respective pilot pseudo noise offset measurements are within range and have a pilot signal receivable by a mobile station concurrently, thereby confirming a valid identification of the two or more base stations."

In contrast, the present invention is a method of determining position information for a mobile station in a wireless system. The method includes the steps of collecting a plurality of pilot pseudo noise offsets and identifying a base station for each of the plurality of pilot pseudo noise offsets. The method also includes the step of evaluating

the probability that two or more base stations identified using respective pilot pseudo noise offset measurements are within range and have a pilot signal receivable by a mobile station concurrently, thereby confirming a valid identification of the two or more base stations.

The United States Court of Appeals for the Federal Circuit (CAFC) has stated that in determining the propriety of a rejection under 35 U.S.C. § 103, it is well settled that the obviousness of an invention cannot be established by combining the teachings of the prior art absent some teaching, suggestion or incentive supporting the combination. See In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 U.S.P.Q. 657 (Fed. Cir. 1985); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 221 U.S.P.Q. 929 (Fed. Cir. 1984). The law followed by our court of review and the Board of Patent Appeals and Interferences is that “[a] prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art.” In re Rinehart, 531 F.2d 1048, 1051, 189 U.S.P.Q. 143, 147 (C.C.P.A. 1976). See also In re Lalu, 747 F.2d 703, 705, 223 U.S.P.Q. 1257, 1258 (Fed. Cir. 1984) (“In determining whether a case of prima facie obviousness exists, it is necessary to ascertain whether the prior art teachings would appear to be sufficient to one of ordinary skill in the art to suggest making the claimed substitution or other modification.”)

A rejection based on 35 U.S.C. § 103 must rest on a factual basis, with the facts being interpreted without a hindsight reconstruction of the invention from the prior art. Thus, in the context of an analysis under 35 U.S.C. § 103, it is not sufficient merely to

identify one reference that teaches several of the limitations of a claim and another that teaches several limitations of a claim to support a rejection based on obviousness. This is because obviousness is not established by combining the basic disclosures of the prior art to produce the claimed invention absent a teaching or suggestion that the combination be made. Interconnect Planning Corp. v. Fiel, 774 F.2d 1132, 1143, 227 U.S.P.Q. (BNA) 543, 551 (Fed. Cir. 1985); In re Corkhill, 771 F.2d 1496, 1501-02, 226 U.S.P.Q. (BNA) 1005, 1009-10 (Fed. Cir. 1985). The relevant analysis invokes a cornerstone principle of patent law:

That all elements of an invention may have been old (the normal situation), or some old and some new, or all new, is . . . simply irrelevant. Virtually all inventions are combinations and virtually all are combinations of old elements. Environmental Designs v. Union Oil Co. of Cal., 713 F.2d 693, 698 (Fed. Cir. 1983) (other citations omitted).

A patentable invention . . . may result even if the inventor has, in effect, merely combined features, old in the art, for their known purpose without producing anything beyond the results inherent in their use. American Hoist & Derek Co. v. Sowa & Sons, Inc., 220 U.S.P.Q. (BNA) 763, 771 (Fed. Cir. 1984) (emphasis in original, other citations omitted).

As the Court of Appeals for the Federal Circuit noted, “[w]hen a rejection depends upon a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references.” Ecolchem, Inc. v. Southern Calif. Edison, 56 U.S.P.Q. 2d 1065, 1073 (Fed. Cir. 2000).

Here, it is respectfully submitted that there is simply no motivation provided in the Kong ‘186 patent or the Chen ‘701 patent to combine any of the teachings. Accordingly,

it is respectfully requested that the 35 U.S.C. § 103 rejection is improper and Applicant respectfully requests its withdrawal.

Furthermore, even if it is assumed that combining the teachings of the Kong '186 patent and the Chen '701 patent is proper, Applicant respectfully submits that such a combination would not disclose or suggest the invention of **independent claim 8** of the present application.

For instance, the Kong '186 patent merely discloses that the position of a base station is "obtained" (col. 4, l. 51). Kong does not disclose or suggest how the base station position is "obtained." Thus, the Kong '186 patent fails to disclose or suggest "evaluating the probability that two or more base stations identified using respective pilot pseudo noise offset measurements are within range and have a pilot signal receivable by a mobile station concurrently, thereby confirming a valid identification of the two or more base stations" as set forth in claim 8.

Also, the Chen '701 patent merely discloses using pattern matching to identify a sub-cell that a mobile station is located in. In order to identify the particular sub-cell, attempts are made to match attributes reported by a mobile station to attribute patterns stored in a database. The patterns in the database each include multiple alternative base stations. Thus, even if a set of attributes is deemed to match a sub-cell, it does not uniquely identify the set of base stations. For example, in Figure 4, column "BS3" and row "C4", it is unclear whether base station 172 or 173 is identified. Likewise, in column "BS2" and row "C2", it is unclear whether the pilot ID is 64 or 232 even if one were to assume that the base station ID is known. (Both even have the same probability of 0.18.) Furthermore, the purpose of the system in the Chen '701 patent is

to identify a sub-cell and not base stations. Thus, the Chen '701 fails to disclose or suggest "evaluating the probability that two or more base stations identified using respective pilot pseudo noise offset measurements are within range and have a pilot signal receivable by a mobile station concurrently, thereby confirming a valid identification of the two or more base stations" as set forth in claim 8.

Accordingly, Applicant respectfully submits that claim 8 is allowable and respectfully requests reconsideration of the rejection of claim 8 based on 35 U.S.C. § 103(a). Claims 9 through 21 are each ultimately dependent upon claim 8 and add perfecting limitations. Accordingly, Applicant respectfully submits that claims 9 through 21 are allowable and respectfully requests reconsideration of the rejection of claims 9 through 21 based on 35 U.S.C. § 103(a).

Independent claim 22 also includes the limitation of "evaluating the probability that two or more base stations identified using respective pilot pseudo noise offset measurements are within range and have a pilot signal receivable by a mobile station concurrently, thereby confirming a valid identification of the two or more base stations." Applicant respectfully submits that claim 22 is allowable for the same reasons given above with respect to claim 8. Accordingly, Applicant respectfully requests reconsideration of the rejection of claim 22 based on 35 U.S.C. § 103(a). Claims 23 through 35 are each ultimately dependent upon claim 22 and add perfecting limitations. Accordingly, Applicant respectfully submits that claims 23 through 35 are allowable and respectfully requests reconsideration of the rejection of claims 23 through 35 based on 35 U.S.C. § 103(a).

Independent claim 36 also includes the limitation of "evaluating the probability that two or more base stations identified using respective pilot pseudo noise offset measurements are within range and have a pilot signal receivable by a mobile station concurrently, thereby confirming a valid identification of the two or more base stations." Applicant respectfully submits that claim 36 is allowable for the same reasons given above with respect to claim 8. Accordingly, Applicant respectfully requests reconsideration of the rejection of claim 36 based on 35 U.S.C. § 103(a). Claims 37 through 49 are each ultimately dependent upon claim 36 and add perfecting limitations. Accordingly, Applicant respectfully submits that claims 37 through 49 are allowable and respectfully requests reconsideration of the rejection of claims 37 through 49 based on 35 U.S.C. § 103(a).

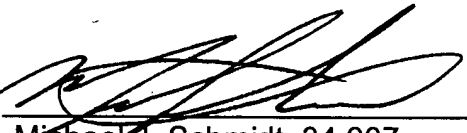
Independent claim 50 also includes the limitation of "evaluating the probability that two or more base stations identified using respective pilot pseudo noise offset measurements are within range and have a pilot signal receivable by a mobile station concurrently, thereby confirming a valid identification of the two or more base stations." Applicant respectfully submits that claim 50 is allowable for the same reasons given above with respect to claim 8. Accordingly, Applicant respectfully requests reconsideration of the rejection of claim 50 based on 35 U.S.C. § 103(a). Claims 51 through 63 are each ultimately dependent upon claim 50 and add perfecting limitations. Accordingly, Applicant respectfully submits that claims 51 through 63 are allowable and respectfully requests reconsideration of the rejection of claims 51 through 63 based on 35 U.S.C. § 103(a).

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: October 28, 2005

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